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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,099	02/27/2004	Joseph L. Hellerstein	YOR920030549US1 (590.127)	9008
35195 7590 11/28/2007 FERENCE & ASSOCIATES LLC 409 BROAD STREET PITTSBURGH, PA 15143			EXAMINER ZHE, MENG YAO	
			ART UNIT 2195	PAPER NUMBER
			MAIL DATE 11/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/789,099

Applicant(s)

HELLERSTEIN ET AL.

Examiner

MengYao Zhe

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/27/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-23 are presented for examination.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- A. The following claims lack antecedent basis:

- i) Claims 1, 12, and 23, "the start times"
- ii) Claims 2, 13, "the duration"
- iii) Claims 3, 14, "the value"
- iv) Claims 6, 17, "the costs"
- v) Claims 7, 18, "the total execution time"
- vi) Claims 10, 21, "the average response time"
- vii) Claims 11, 22, "the weighted average response time"

- B. The following claim languages are unclear and indefinite:

- i) Claim 1, lines 1-2, it is uncertain what is meant by "request for change" <i.e. what is being changed? Is it changing the schedule for executing tasks?>

Line 3, it is unclear how the step of “deciding” if a RFC should be done is performed <i.e. what is the decision based on? Timing constraints of these RFCs or resources availability?>

Claims 12 and 23 have the same deficiencies as claim 1 above.

ii) Claims 3-4, it is not understood what is meant by “the value/the number of RFCs” <i.e. what are these values/number? How are these values determined or numbers accomplished, by assigning the task to more servers?>.

Claims 14, 15 have the same deficiencies as claim 3 above.

iii) Claim 5, it is uncertain as to what is meant by “total downtime” <i.e. is the down time of the computing system for servicing the RFC?>.

Claims 6, 16, 17, have the same deficiencies as claim 5 above.

iv) Claim 7, it is unclear what “execution time” is referring to <i.e. is it the execution time of all the tasks that a server has to execute? Or is it the execution time of a task?>.

Claim 18 has the same deficiencies as claim 7 above.

v) Claim 10, it is unclear what “the average response time of each RFCs” is <i.e. What is an average response time? Is it the amount of time a request has to wait before it gets serviced by the server?>

Claims 11, 21, 22 have the same deficiencies as claim 10 above.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 12, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfinger et al., Patent No. 6,415,259 (hereafter Wolfinger).

6. As per claims 1, 12, 23, Wolfinger teaches a method for planning and scheduling tasks within at least one request for change (RFC) within a change window in a computing system (Column 1, lines 41-53; Column 6, lines 29-35), comprising the steps of

deciding whether or not an RFC should be done (Column 3, lines 21-26; Column 12, lines 45-60);

for each RFC to be done, assigning individual tasks within each RFC to a acceptable servers; (Column 5, lines 1-5; Column 6, lines 52-55; Column 8, lines 30-44);

for each RFC to be done, assigning the start times to said individual tasks  
(Column 6, lines 29-35).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-11, 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolfinger et al., Patent No. 6,415,259 (hereafter Wolfinger) in view of Eilam et al., Pub. No. 2004/0111509 (hereafter Eilam).

9. As per claims 2, 13, Wolfinger does not specifically teach the step of reserving all the servers involved for the duration that begins at the start of the first task and ends at the finish of the last task for each RFC that should be done

However, Eilam teaches the step of reserving all the servers involved for the duration that begins at the start of the first task and ends at the finish of the last task for each RFC that should be done for the purpose of having resources for the customers at required times (Para 4).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to combine the teachings of Wolfinger with the step of reserving all the servers involved for the duration that begins at the start of the first task and ends at the finish of the last task for each RFC that should be done, as taught by Eilam, because it allows having resources for the customers at required times.

10. As per claims 3, 14, Wolfinger teaches the step of maximizing the value of all RFCs done (Abstract, lines 3-5).

11. As per claims 4, 15, Wolfinger teaches the step of maximizing the number of RFCs done (Column 7, lines 60-64; Column 8, lines 13-20).

12. As per claims 5, 16, Wolfinger teaches the step of minimizing total downtime (Column 7, lines 60-64; Column 8, lines 13-20).

13. As per claims 6, 17, Eilam teaches the step of minimizing the costs associated with downtime (Abstract, lines 4-7; Para 27).

14. As per claims 7, 18, Eilam teaches the step of minimizing the total execution time (Column 7, lines 59-64).

15. As per claims 8, 19, Wolfinger teaches the step of maximizing the number of RFCs meeting their deadlines (Column 16, line 5, 25-30, 52-54).

16. As per claims 9, 20, Eilam teaches the step of minimizing multiple deadline penalties associated with the RFCs and/or their respective tasks (Para 27, 92, 95)

17. As per claims 10, 11, 21, 22, Wolfinger in view of Eilam does not specifically teach the step of minimizing the average response time and the weighted average response time of each RFCs. However, it would have been obvious to one having ordinary skill in the art of scheduling optimization at the time of the applicant's invention to optimize the response time of the RFC in order to optimize the entire scheduling plan so that penalty is reduced.

### ***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MengYao Zhe whose telephone number is 571-272-



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6946. The examiner can normally be reached on Monday Through Friday, 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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